

Please amend Claim 9 as follows:

9. (amended) An improvement in a method for creating a catalyst for a preselected reaction, said method comprising:

- a) synthesizing a mixture of oligonucleotides from nucleotide building blocks each having a region of randomized sequence
- b) incubating said mixture under conditions where oligonucleotides that catalyze said reaction undergo as a result of their catalytic activity a chemical transformation that makes them preferentially partitionable from or amplifiable to oligonucleotides in the remainder of the mixture that have diminished or none of said catalytic activity,
- c) partitioning the oligonucleotides with increased catalytic activity from the other oligonucleotides in the mixture
- d) amplifying the oligonucleotides having increased affinity *in vitro* to yield a mixture of oligonucleotides enriched in those with increased affinity for said target, wherein said [the] improvement comprises:
 - e) including an organic cofactor during step (b) [an organic cofactor], wherein said organic cofactor carries [carrying] an organic functional group [with affinity for] that binds noncovalently to the oligonucleotides so enriched.

"Clean" version of Claim 9 (amended):

9. (amended) An improvement in a method for creating a catalyst for a preselected reaction, said method comprising:

- a) synthesizing a mixture of oligonucleotides from nucleotide building blocks each having a region of randomized sequence
- b) incubating said mixture under conditions where oligonucleotides that catalyze said reaction undergo as a result of their catalytic activity a chemical transformation that makes them preferentially partitionable from or amplifiable to oligonucleotides in the remainder of the mixture that have diminished or none of said catalytic activity,
- c) partitioning the oligonucleotides with increased catalytic activity from the other oligonucleotides in the mixture
- d) amplifying the oligonucleotides having increased affinity *in vitro* to yield a mixture of oligonucleotides enriched in those with increased affinity for said target, wherein said improvement comprises:
 - e) including an organic cofactor during step (b), wherein said organic cofactor carries an organic functional group that binds noncovalently to the oligonucleotides so enriched.